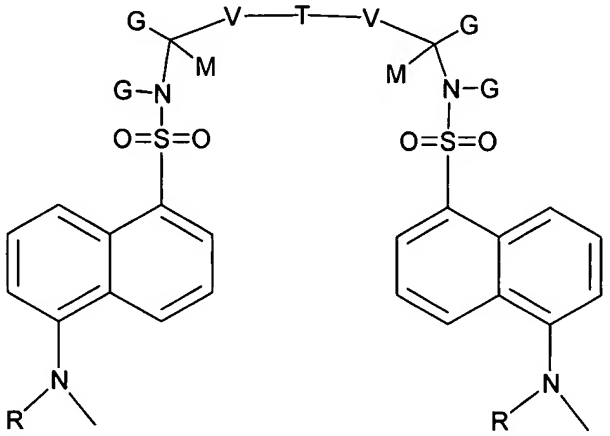
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-83. (Canceled)

84. (Currently Amended) A compound represented by the structure set forth in formula (II):



(II)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula II;

wherein G groups may be the same or different and are selected independently among hydrogen, $-(CH2)_m(COOH)$ and COOH such that said compound of formula II ~~comprises~~ is selected from the group consisting of one or two carboxyl groups, wherein m is an integer of 1,2 or 3;

V groups may be the same or different and are selected among null or $-(CH_2)_k-$; k being 1 or 2;

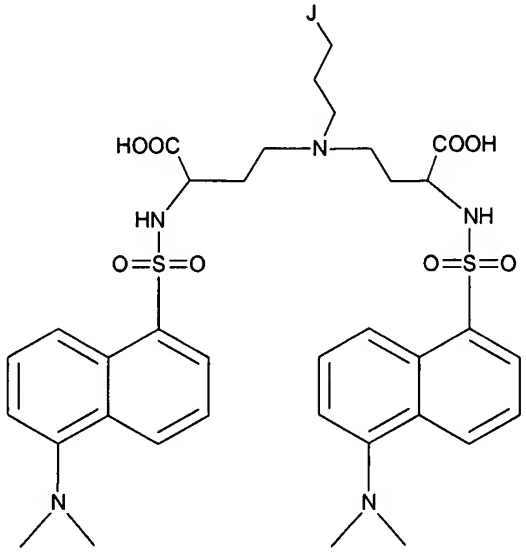
M groups may be the same or different, and are each independently selected from null, hydrogen, alkyl-amide, hydroxyalkyl and fluoroalkyl, wherein said alkyl has 1, 2 or 3 carbon atoms; and

T is -O-, -S-, -NH-, -N(B)-,-Q-, and -N(B'-Q)-, -N(B'-OH)-, -and -N(B'-F)- wherein B is an optionally substituted alkyl of 1, 2, 3, 4, 5 or 6 carbon atoms and B' is an optionally substituted alkylene of 1, 2, 3, 4, 5 or 6 carbon atoms;

Q is a marker for imaging and a metal chelate; said marker for imaging being selected from the group consisting of ~~comprising~~ a fluorescent label, a radio-label, a marker for X-ray, a marker for MRI, a marker for PET scan~~, or a label capable of undergoing an enzymatic reaction that produces a detectable color~~; and

R is hydrogen, linear or branched alkyl of 1, 2, 3 or 4 carbon atoms, or the group $(CH_2)_mCH(NH_2)COOH$, wherein m is an integer of 0, 1, 2, 3 or 4, R moieties are either the same or different.

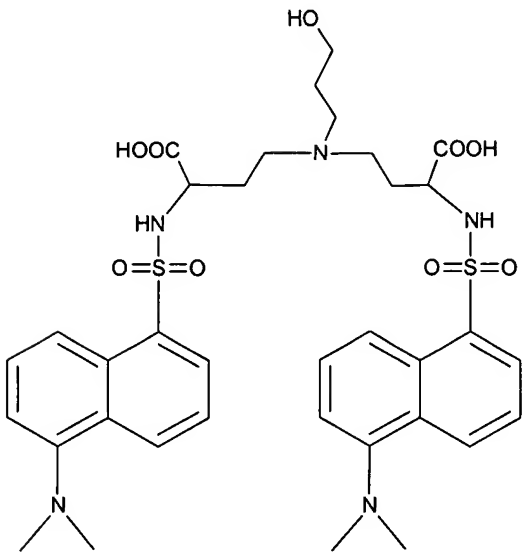
85. (Currently Amended)The compound of Claim 84 represented by the structure set forth in formula (III):



(III)

wherein J is selected ~~among~~ from the group consisting of hydrogen, –OH, and -Q; wherein said Q is selected ~~among~~ from the group consisting of an N_2S_2 chelator and -F; ~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula III.

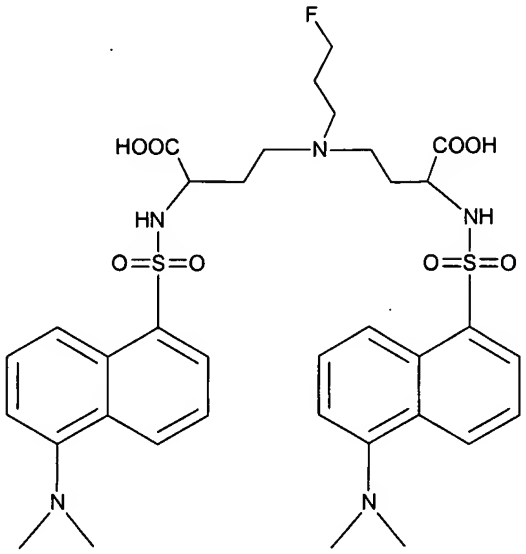
86. (Currently Amended) The compound of Claim 85 represented by the structure set forth in formula (IV):



(IV)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula IV.

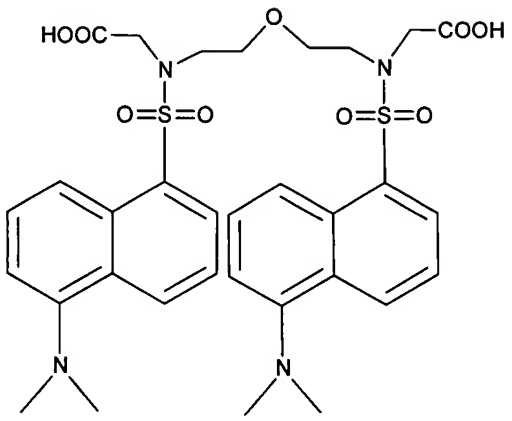
87. (Currently Amended) The compound of Claim 85 represented by the structure set forth in formula V:



(V)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (V).

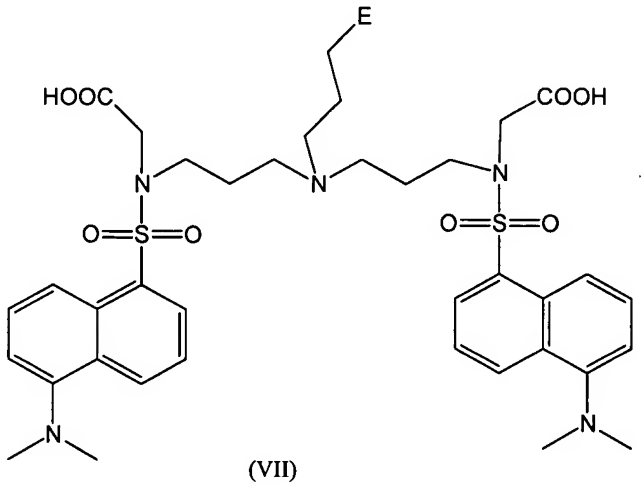
88. (Currently Amended) The compound of Claim 85 represented by the structure set forth in formula VI:



(VI)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (VI).

89. (Currently Amended) The compound of Claim 84 represented by the structure set forth in formula VII:

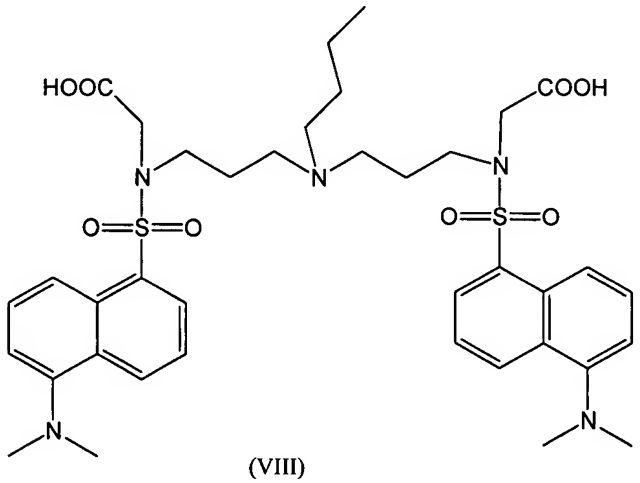


(VII)

wherein E is selected from –OH, -F, $-CH_3$ and Q; wherein said Q is selected from an N_2S_2 chelator and -F ;

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (VII).

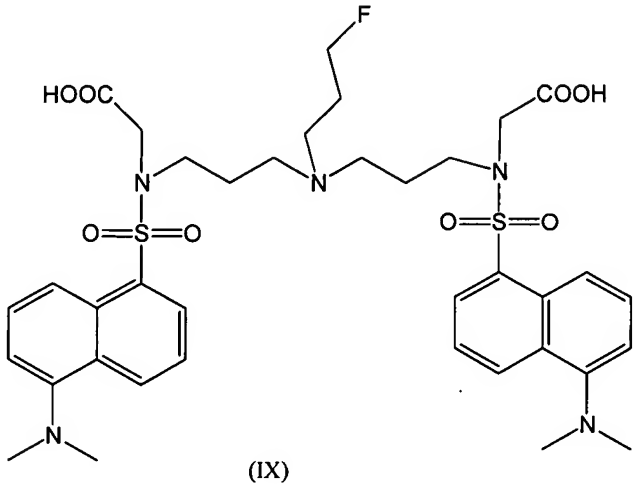
90. (Currently Amended) The compound of Claim 89 represented by the structure set forth in formula VIII:



(VIII)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (VIII).

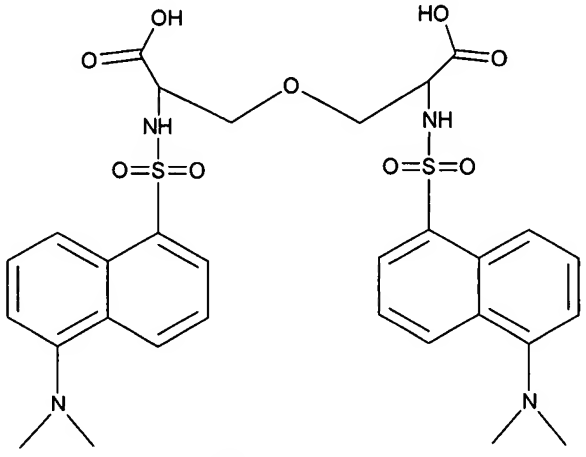
91. (Currently Amended)The compound of Claim 89 represented by the structure set forth in formula IX:



(IX)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (IX).

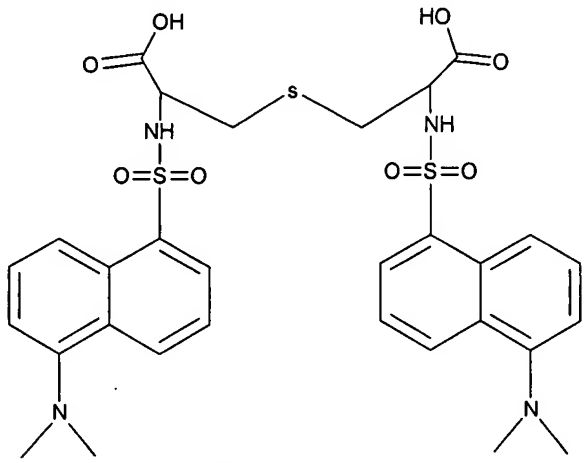
92. (Currently Amended) The compound of Claim 84 represented by the structure set forth in formula X:



(X)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (X).

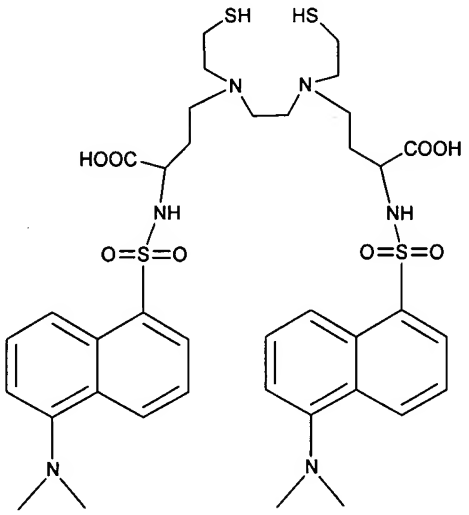
93. (Currently Amended) The compound of Claim 84 represented by the structure set forth in formula XI:



(XI)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of formula (XI).

94. (Currently Amended) The compound of Claim 84 represented by the structure set forth in formula XII:



(XII)

~~including~~ and pharmaceutically acceptable salts, hydrates, solvates and metal chelates of the compound of the formula XII.

95. (Currently Amended)The compound of Claim 84, wherein the chelated metal is selected ~~among~~ from the group consisting of Technetium, oxo-technetium, Rhenium and oxo-rhenium radioisotopes.

96. (Currently Amended) A diagnostic agent comprising a compound according to claim 84 and a metal ~~said metal being comprised within the Q moiety of the compound of claim 84~~.

97. (Currently Amended) A composition comprising ~~as an active component~~ a compound according to claim 84 and a biologically acceptable carrier, said ~~active~~

~~component~~ compound having detectable properties of its own, being capable of chelating a detectable label or being covalently-linked to a detectable label.

98. (Currently Amended) A compound according to claim 84, comprising or being linked to a marker for imaging, wherein said marker for imaging is selected from the group consisting of Tc, Tc=O, In, Cu, Ga, Xe, Tl, Re and Re=O , ^{123}I , ^{131}I , Gd(III), Fe(III), Fe_2O_3, Fe_3O_4, Mn(II) ^{18}F, ^{15}O, ^{18}O, ^{11}C, ^{13}C, ^{124}I, ^{13}N, ^{75}Br, Tc-99m or In-111.

99. (Canceled)

100. (Previously Presented) A method for the detection of physiological disorders characterized by the presence of cells having perturbed membranes (PM cells) comprising the steps of:

(i) administering a diagnostic agent according to claim 96; and

(ii) imaging the patient, so as to identify the presence of cells having perturbed membranes.

101. (Currently Amended) A method according to Claim 100, wherein the diagnostic agent comprises a radiolabel, and the detection of the physiological ~~medical~~ disorders is by a radio-imaging technique.

102. (Currently Amended) A method according to Claim 100, wherein the diagnostic agent comprises a radiolabel, and the detection of the physiological ~~medical~~ disorders is by single photon emission computed tomography (SPECT), or positron emission tomography (PET).

103. (Previously Presented) A method according to Claim 100 for the detection of cells undergoing a death process.

104. (Previously Presented) A method according to Claim 103, for the detection of cells undergoing apoptosis.

105. (Currently Amended) A method according to Claim 100, for the detection of procoagulant particles, selected ~~among~~ from activated platelets, platelet-derived microparticles, and apoptotic bodies.

106. (Previously Presented) A method according to Claim 100, for the detection of a blood clot.

107. (Currently Amended) A method according to Claim 100, for the detection of activated inflammatory cells, selected ~~among~~ from activated white blood cells and activated tissue macrophages.

108. (Currently Amended) A method according to Claim 100, for detection of cell death within a tumor~~, for monitoring of aggressiveness of a tumor,~~ or for detection of metastases of a tumor.

109. (Previously Presented) A method according to Claim 100, for monitoring death of tumor cells in response to an anti-cancer treatment, selected from chemotherapy and radiotherapy.

110. (New) A method for the detection of a cell having a perturbed membrane (PM cell) in a cell sample, the method comprising:

(i) contacting the cell sample with a compound according to claim 84;

(ii) detecting the amount of agent bound to said cell in said sample;

(iii) comparing the amount of agent bound to said cell in said sample with an amount of the agent bound to a control cell, said control cell being a cell maintaining its normal membrane organization;

wherein if more of the agent is bound to said cell in said sample than the amount of agent bound to said control cell, said cell in said sample being detected as a PM cell.